



162PC01D



Actual product appearance may vary.

Pressure Sensors: Measurement Type: Differential, Gage; Signal Conditioning: Amplified; Pressure Range: 0 in H₂O to 27.68 in H₂O; Port Style: Straight

Features

- Robust package
- PCB termination
- Fully signal conditioned
- Amplified
- Low pressure measurement

Potential Applications

Medical

- CPAP (Continuous Positive Airway Pressure) equipment
- Respirators and ventilators
- Blood glucose monitors
- Oxygen conservers
- Oxygen concentrators
- Nebulizers
- Blood cell separators

Environmental

- Filter monitoring equipment

Description

160PC Series pressure sensors provide an output voltage that is proportional to the pressure applied. They operate from 0 inches to 2.5 inches of water to 0 inches to 27.68 inches of water using a single, positive supply voltage ranging from 6.0 Vdc to 16.0 Vdc.

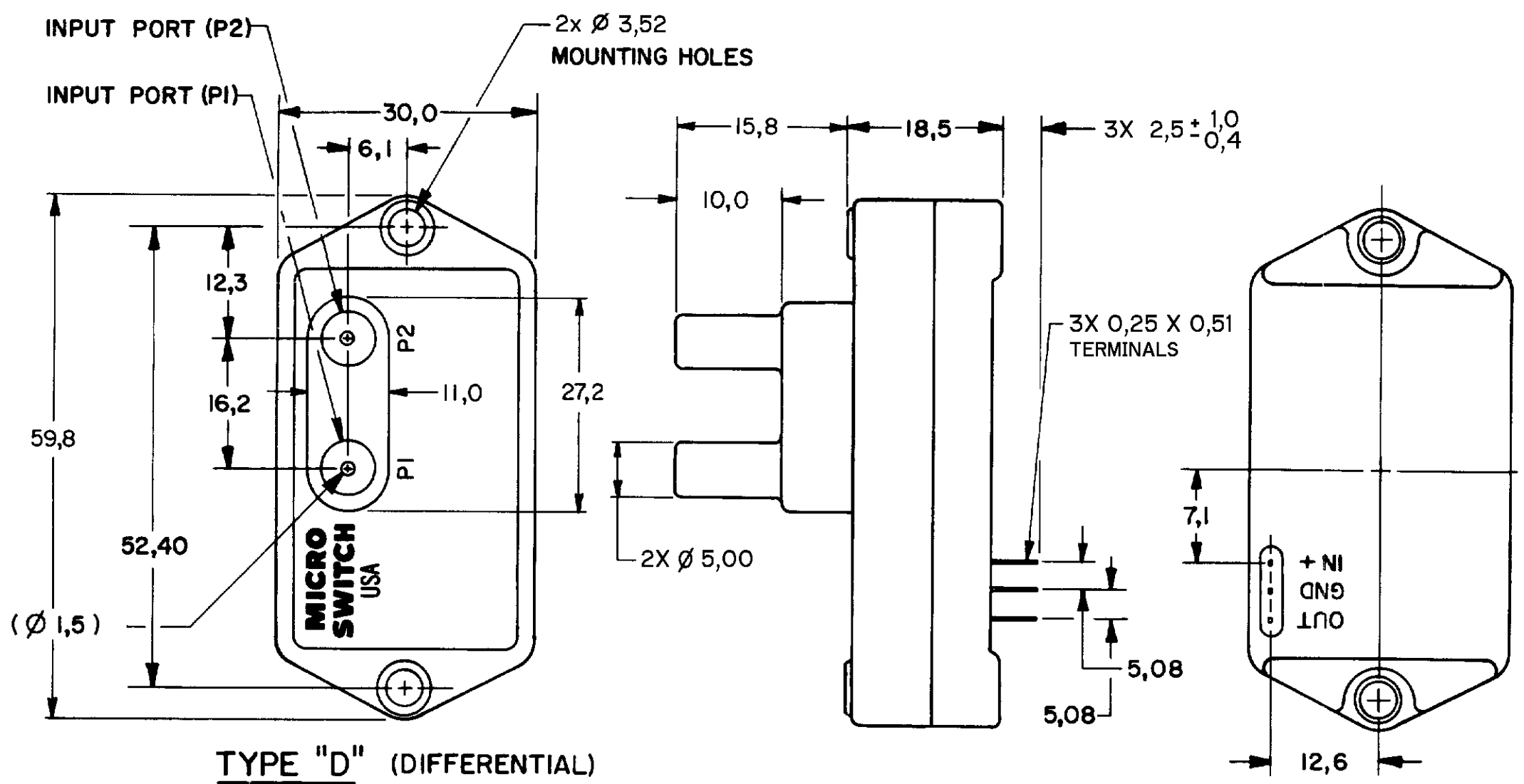
Product Specifications	
Measurement Type	Differential, Gage
Signal Conditioning	Amplified
Pressure Range	0 in H ₂ O to 27.68 in H ₂ O
Maximum Overpressure	5.0 psi
Supply Voltage	6.0 Vdc min., 8.0 Vdc typ., 16.0 Vdc max.
Compensated	Yes
Output Calibration	Yes
Response Time	1 ms max.
Termination	PCB
Port Style	Straight
Package Style	Honeywell - 100PC

Linearity	± 2.0% span max. (P2 > P1)
Typical Sensitivity	0.18 V/in H ₂ O
Full Scale Span	5.0 Vdc typ.
Null Offset	1.0 Vdc typ.
Repeatability & Hysteresis Error	± 0.15 % span typ.
Shock	Qualification tested to 150 g
Vibration	MIL-STD-202 Method 213 (150 g half sine 11 ms)
Weight	28 g [0.987 oz]
Operating Temperature Range	-40 °C to 85 °C [-40 °F to 185 °F]
Compensated Temperature Range	-18 °C to 63 °C [0 °F to 145 °F]
Storage Temperature Range	-55 °C to 125 °C [-67 °F to 257 °F]
Media Compatibility	Port 1: Dry gases only. Port 2: Wetted materials. Polyester housing, epoxy adhesive, silicon, borosilicate glass and silicon-to-glass bond.
UNSPSC Code	411121
UNSPSC Commodity	411121 Transducers
Availability	Global
Series Name	160PC

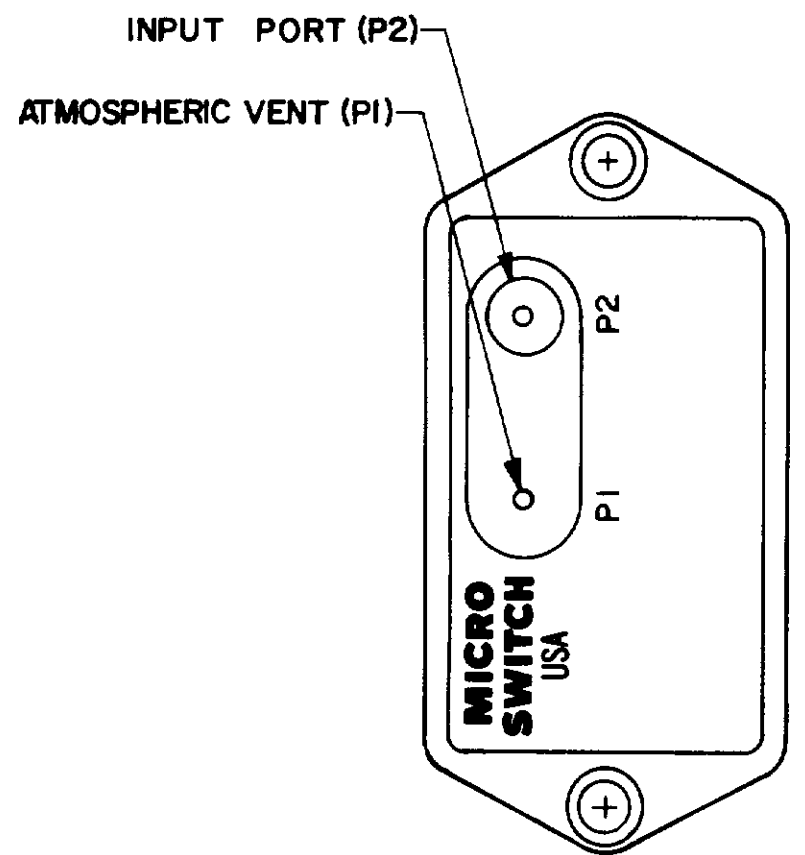
M 160PC01 SERIES
CHART 1

METRIC	INCH
0,4	.016
0,25	.010
0,51	.020
1,0	.039
1,5	.04
2,5	.099
3,52	.139
5,00	.197
5,08	.200
6,1	.240
7,1	.280
10,0	.39
11,0	.43
12,3	.484
12,6	.496
15,8	.51
16,2	.64
17,9	.70
18,5	.73
27,2	1.07
30,0	1.18
52,40	2.06
59,8	2.35

CATALOG LISTING	TYPE	OPERATING PRESSURE RANGE
Ⓜ	D	0 TO -1.0 PSID
161PC01G	G	0 TO -1.0 PSIG
162PC01D	D	0 TO 1.0 PSID
162PC01G	G	0 TO 1.0 PSIG



TYPE "D" (DIFFERENTIAL)



TYPE "G" (GAGE)

GENERAL OPERATING CHARACTERISTICS	
PRESSURE RANGE	0 TO 51.7mm Hg (0 TO 1PSI)
OVERPRESSURE	288 mm Hg (5 PSI)
TEMPERATURE RANGES	STORAGE -55 TO +125°C OPERATE -40 TO +85°C COMPENSATED -18 TO +63°C
SUPPLY VOLTAGE	6 TO 12 VDC
SUPPLY CURRENT	20 mA MAX WITH 10K LOAD
SHORT CIRCUIT LIMIT	MAY BE SHORTED INDEFINITELY
OUTPUT RIPPLE	NONE
GROUND REFERENCE	SUPPLY AND OUTPUT ARE COMMON

ELECTRICAL PERFORMANCE AT 25°C AND 8.00 ± 0.01 VDC SUPPLY	
OUTPUT VOLTAGE	
161PC01D OR G	
NULL (0 PSID)	1.00 ± 0.05 VDC
FULL SCALE (1.0 PSID)	6.00 ± 0.20 VDC (P2 < P1)
162PC01D OR G	
NULL (0 PSI)	1.00 ± 0.05 VDC
FULL SCALE (1.0 PSI)	6.00 ± 0.20 VDC (P2 > P1)
SENSITIVITY	(5.0 V/PSI)
LINEARITY (% F.S.O.) Δ (BFSL)	± 1.0 MAX (P2 < P1) ± 2.0 MAX (P2 > P1)
HYSTERESIS & REPEATABILITY (%F.S.O.) Δ	±0.15 TYPICAL
TEMPERATURE ERROR (%F.S.O.) Δ	
5° < 25° > 45°C	±0.5 TYP
-18° < 25° > 63°C	±1.0 MAX
-40° < 25° > 85°C	±2.0 TYP
RESPONSE TIME	1 m SEC MAX

- NOTES**
- INPUT MEDIA:
P1 - DRY GASES ONLY: CONNECTION SIDE OF SENSOR
P2 - LIMITED ONLY TO THOSE MEDIA THAT WILL NOT ATTACK POLYESTER SILICON, OR SILICONE BASED ADHESIVE
 - TERMINALS ARE PLATED FOR SOLDERING
 - LIMIT SOLDERING TO 315°C MAX FOR 10 SECONDS
 - UNITS ARE OF PLASTIC CONSTRUCTION
 - F.S.O. IS THE ALGEBRAIC DIFFERENCE BETWEEN THE OUTPUT END POINTS (NULL AND FULL PRESSURE)

THIRD ANGLE PROJECTION	
SCALE NONE	
DO NOT SCALE PRINT	
UNLESS OTHERWISE SPECIFIED TOLERANCES ARE	
NO PLACE ()	± 1 mm
ONE PLACE (0.0)	± 0.4 mm
TWO PLACE (0.00)	± 0.15 mm
ANGLES	±
WEIGHT	31 GRAMS

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LOW PRESSURE
TRANSDUCER

CATALOG LISTING
160PC01 SERIES
CHART 1

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 PAGE 1 OF 1
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